Claim Amendments

Please amend claims 1 and 14 as follows.

1. (currently amended) An apparatus for transporting a semiconductor wafer to or from ~~one position to another position~~ a wafer cassette housing with increased damage resistance upon misalignment comprising:

an end effector having a base portion and at least one finger extending from the base portion, the finger having an uppermost top surface and a bottom surface ~~and the~~ to define the finger including a free end[[,]]; [[and]]

wherein the uppermost top surface includes a substantially flat portion extending from the base portion, and wherein the finger includes a tapered portion extending from the substantially flat portion towards bottom surface to define the free end; and,

wherein the tapered portion includes an angled surface formed at an angle ranging from about 2-8 degrees with respect to the substantially flat portion; and,

[[and]] wherein the thickness of the finger between the substantially flat portion [[of]] and the bottom surface ranges from about ~~1.0-1.95 mm~~ 0.05-0.2 mm less than an opening defined between adjacently positioned wafers in the wafer cassette housing.

2. - 3. (canceled)

4. (original) An apparatus as set forth in claim 1 wherein only a single finger extends from the base portion.

5. (original) An apparatus as set forth in claim 1 having at least two spaced apart fingers extending from the base portion.

6. (original) An apparatus as set forth in claim 1 wherein the tapered portion includes an angled surface formed at an angle ranging from about 4-5 degrees with respect to the substantially flat portion.

7. (original) An apparatus as set forth in claim 1 wherein the length of the tapered portion ranges from about 3-8 mm.

8. (previously presented) An apparatus as set forth in claim 1 wherein the finger further includes a vacuum port hole formed therein for drawing a vacuum therethrough and gripping a flat object.

9. (original) An apparatus as set forth in claim 1 wherein the end effector is made from a material comprising a ceramic.

10. (original) An apparatus as set forth in claim 9 wherein the ceramic comprises at least one of alumina and silicon carbide.

11. (original) An apparatus as set forth in claim 1 wherein the end effector is made from material comprising a metal.

12. (original) An apparatus as set forth in claim 11 wherein the metal comprises aluminum.

13. (original) An apparatus as set forth in claim 1 further comprising a robot having a robot arm, and wherein the end effector is attached to an end of the robot arm, and wherein the robot is constructed and arranged to move the end effector in a plurality of directions.

14. (currently amended) An apparatus for transporting a semiconductor wafer with increased damage resistance upon misalignment comprising:

a robot having a robot arm for movement in a plurality of directions, and an end effector secured to an end of the robot arm;

a wafer cassette housing having first and second side walls and a plurality of spaced apart ledges extending inwardly from each of the side walls constructed and arranged ~~so that corresponding ledges on each side wall are positioned~~ to support

a plurality of semiconductor wafers in space apart adjacent relationship defining an opening extending between said semiconductor wafers, said opening ~~, and the housing having a front face with an opening formed therein~~ for loading and unloading ~~the cassette housing with~~ the semiconductor wafers;

~~at least two spaced apart adjacently positioned semiconductor wafers supported by corresponding ledges extending inwardly from the first and second side walls of the wafer cassette housing to define an opening between adjacently positioned semiconductor wafers;~~

[[an]] wherein the end effector ~~having~~ comprises at least one extension wherein each extension includes an uppermost top surface comprising a substantially flat portion and a bottom surface ~~and the extension having a free end, and the top surface having a substantially flat portion~~, wherein [[and]] a tapered portion extends[[ing]] from the substantially flat portion towards the bottom portion to define a tapered free end[[,]]; [[and]]

wherein the thickness of the extension between the substantially flat portion and the bottom surface is about 0.05-0.2 mm less than the opening dimension between the adjacently positioned semiconductor wafers ~~in the cassette housing~~ to allow entry of the extension into said opening without contacting the semiconductor wafers.

15. (original) An apparatus as set forth in claim 14 wherein the tapered portion includes an angled surface formed at an angle ranging from about 2-8 degrees with respect to the substantially flat portion.

16. (original) An apparatus as set forth in claim 14 wherein the tapered portion includes an angled surface formed at an angle ranging from about 4-5 degrees with respect to the substantially flat portion.

17. (original) An apparatus as set forth in claim 14 further comprising a second extension and wherein the extensions are spaced apart from each other.

18. (original) An apparatus as set forth in claim 14 wherein the length of the tapered portion ranges from about 3-8 mm.

19. 20. (canceled)